Commonwealth of Kentucky
Environmental and Public Protection Cabinet
Department for Environmental Protection
Division for Air Quality
803 Schenkel Lane
Frankfort, Kentucky 40601
(502) 573-3382

Proposed

AIR QUALITY PERMIT

Issued under 401 KAR 52:020

Permittee Name:	**East Kentucky Power Cooperative, Inc.**
Mailing Address:	**J.K. Smith Generating Station** **4758 Lexington Road, P.O. Box 707** **Winchester, Kentucky 40392-0707**
Source Name:	**J.K. Smith Generating Station**
Mailing Address:	**4758 Lexington Road, P.O. Box 707** **Winchester, Kentucky 40392-0707**
Source Location:	**Irvine Road, Clark County, Kentucky** **Near the Community of Trapp, Kentucky**
Permit Number:	**V-05-070**
Source A. I. #:	**808**
Activity #:	**APE20050002**
Review Type:	**Title V, Operating, Acid Rain**
Source ID #:	**21-049-00027**
ORIS Code:	**0054**
Regional Office:	**Frankfort Regional Office** **643 Teton Trail, STE B** **Frankfort, KY 40601-1758** **502) 564-3358**
County:	**Clark**
Application Complete Date:	**December 29, 2000**
Issuance Date:	**June 16, 2006**
Revision Date:	
Expiration Date:	**June 16, 2011**

John S. Lyons, Director
Division for Air Quality

Revised 10/19/05

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Rev #	Permit type	Log #	Complete Date	Issuance Date	Summary of Action
----	**Initial Issuance**	**B728**	**11/19/92**	**3/24/93**	**Construction Permit C-93-045 for Proposed Units 01-05**
----	**Initial Issuance**	**51378**	**12/29/00**	**7/27/01**	**PSD Construction and operating Permit V-01-004**
----	**Initial Issuance**	**APE-2005-0002**	**12/29/00**	**June 16, 2006**	**Combined Source-wide Title V and Acid Rain Permit V-05-070**

SECTION A - PERMIT AUTHORIZATION

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first having submitted a complete application and received a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:020, Title V Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

SECTION B -EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emissions Units: 01-04 (SCT01-SCT04)

Description:

Emission Units 01-03: 1492 mmBtu/hr maximum rated heat input capacity, each, 115 MW nominal rated capacity output, each. Asea Brown Boveri GT 11N2 natural gas-fired peak load combustion turbines equipped with water injection for control.
Secondary Fuel: Low (<=0.05 %) Sulfur Fuel Oil
Construction commenced: August 1993

Emission Unit 04: 1492 mmBtu/hr maximum rated heat input capacity, each, 115 MW nominal rated capacity output, each. General Electric 7EA natural gas-fired peak load combustion turbines equipped with water injection and Dry Low-NOx Burners for control.
Secondary Fuel: Low (<=0.05 %) Sulfur Fuel Oil
Construction commenced: August 1993

Applicable Regulations:

401 KAR 60:005, incorporating by reference 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines, for emissions unit with a heat input at peak load equal to or greater than 10 mmBtu/hour for which construction commenced after October 3, 1977, and 40 CFR 60, Subpart A, General Provisions.
401 KAR 51:017, Prevention of significant deterioration of air quality
401 KAR 63:021, Existing Sources emitting toxic air pollutants
401 KAR 52:060, Acid Rain Permits, incorporating by reference 40 CFR Parts 72 to 78
401 KAR 51:160, NOx Requirements for Large Utility and Industrial Boilers, incorporating by reference 40 CFR 96
40 CFR Part 75, Continuous Emissions Monitoring (CEM)

1. Operating Limitations:

a) Operating hours shall not exceed 2500 hours for each combustion turbine during any consecutive twelve (12) month total.
b) The permittee shall not operate Unit 04 below 90% load, except during periods of startup and shutdown.
c) Each combustion turbine shall be fired on natural gas not less than 90% of the actual operation hours, and # 2 fuel oil not more than 10% of the actual operation hours during any consecutive twelve (12) month period.
d) Startup shall be defined as going from 0% load up to or above 90% load and shutdown means going from operating load down to 0% load.
e) Elapsed time during each startup or shutdown for each combustion turbine shall not exceed two (2) hours.
f) Each combustion turbine shall not start up or shut down more than 200 times per year.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

2. Emission Limitations:

a) Pursuant to 401 KAR 60:005 incorporating by reference 40 CFR 60.332, and 401 KAR 51:017, except during periods of startup, shutdown, or malfunction, nitrogen oxide emissions level in the exhaust gas from each turbine while burning low sulfur fuel oil, shall not exceed 42 ppm by volume at 15 percent oxygen and on a dry basis when burning number two fuel oil. Compliance shall be assured by following the alternate method approved in 40 CFR 75, in lieu of the water-to-fuel monitoring system or using a CEMS. Compliance with 40 CFR 75 Appendix E shall assure compliance with 40 CFR 60 Subpart GG.

b) Pursuant to 401 KAR 60:005 incorporating by reference 40 CFR 60.332, and 401 KAR 51:017, except during periods of startup, shutdown, or malfunction, nitrogen oxide emissions level in the exhaust gas from each turbine shall not exceed 25 ppm by volume at 15 percent oxygen and on a dry basis when burning natural gas. Compliance shall be assured by following the alternate method approved in 40 CFR 75, in lieu of the water-to-fuel monitoring system or using a CEMS. Compliance with 40 CFR 75 Appendix E shall assure compliance with 40 CFR 60 Subpart GG.

c) Pursuant to 401 KAR 60:005 incorporating by reference 40 CFR 60.333, and 401 KAR 51:017 the sulfur dioxide emissions level in the exhaust gas shall not exceed 500 pounds per hour per each turbine respectively and 2500 tons per year during any consecutive twelve (12) month total for all turbines.

d) The permittee may assure compliance with the corresponding sulfur dioxide allowable emission rate by calculation using representative fuel analysis, and hourly fuel consumption data from the continuous monitoring system. Formula: Pounds (lbs) per hour sulfur dioxide when combusting number two fuel oil = gallons per hour number two fuel oil x density in pounds per gallon (about 7.05 lb/gallon) x percent sulfur/100 x 2.00 lbs sulfur dioxide per lb sulfur (emission factor from Westinghouse Vendor); or lbs per hour sulfur dioxide when combusting natural gas = million cubic feet (mmCF) natural gas per hour x 0.6 lb/mmCF (AP-42).

e) Pursuant to 401 KAR 51:017, except during periods of startup, shutdown, or malfunction, the carbon monoxide emissions level in the exhaust gas for each turbine shall not exceed 75 pounds per hour each, and 375 tons per year during any consecutive twelve (12) month total for all turbines. Formula: lbs per hour carbon monoxide emissions when combusting number two fuel oil = gallons per hour fuel oil x 0.00503 lbs/gallon (emission factor from General Electric Vendor); or lbs per hour carbon monoxide emissions when combusting natural gas = mmCF natural gas per hour x 37.1 lb/mmCF (General Electric Vendor).

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

f) Pursuant to 401 KAR 51:017, the fuel sulfur content due of the natural gas shall not exceed 2.0 grains/1000 SCF.

g) Pursuant to 401 KAR 51:017, the fuel sulfur content due of the number two fuel oil shall not exceed 0.05% sulfur by weight.

h) Pursuant to 401 KAR 51:017, except during periods of startup, shutdown, or malfunction, particulate emissions level in the exhaust gas for each turbine shall not exceed 54 pounds per hour each, and 270 tons per year during any consecutive twelve (12) month total for all turbines. Formula: lbs per hour particulate emissions when combusting number two fuel oil = gallons per hour fuel x 0.00167 lbs/gallon (emission factor from AP-42); or lbs per hour particulate emissions when combusting natural gas = mmCF natural gas per hour x 6.73 lbs/mmCF (AP-42).

i) Pursuant to 401 KAR 51:017, except during periods of startup, shutdown, or malfunction, volatile organic compound emissions level in the exhaust gas for each turbine shall not exceed 26 pounds per hour and 130 tons per year total for all turbines during any consecutive twelve (12) month total. Formula: lbs per hour volatile organic compound emissions when combusting number two fuel oil = gallons per hour fuel oil x 0.00194 lbs/gallon (emission factor from Westinghouse Vendor); or lbs per hour volatile organic compound emissions when combusting natural gas = mmCF natural gas per hour x 13.3 lbs/mmCF (AP-42).

j) Pursuant to 401 KAR 51:017, beryllium emissions level in the exhaust gas for each turbine shall not exceed 0.0038 pounds per hour and 0.019 tons per year total for all turbines during any consecutive twelve (12) month total. Formula: lbs per hour beryllium emissions when combusting number two fuel oil = gallons per hour number two fuel oil x 0.000000043 lbs/gallon (AP-42); or lbs per hour beryllium emissions when combusting natural gas = mmCF natural gas per hour x 0.000012 lbs/mmCF (AP-42).

k) Pursuant to 401 KAR 51:017, sulfuric acid mist emissions level in the exhaust gas for each turbine shall not exceed 15 pounds per hour and 75 tons per year total during any consecutive twelve (12) month total. Formula: lbs per hour sulfuric acid mist emissions when combusting number two fuel oil = gallons per hour number two fuel oil x 0.423 lbs/gallon x percent fuel sulfur/100; or lbs per hour sulfuric acid mist emissions when combusting natural gas = mmCF natural gas per hour x 0.018 lbs/mmCF (AP-42).

l) Pursuant to 401 KAR 63:021, cadmium emissions for all units shall not exceed 0.0642 lbs/hr based on an eight-hour rolling average. Formula: lbs per hour cadmium emissions when combusting number two fuel oil = gallons per hour number two fuel oil x 0.000000667 lbs/gallon (AP-42); or lbs per hour cadmium emissions when combusting natural gas = mmCF natural gas per hour x 0.0011 lbs/mmCF (AP-42).

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

m) Pursuant to 401 KAR 63:021, chromium emissions for all units shall not exceed 0.290 lbs/hr based on an eight-hour rolling average. Formula: lbs per hour chromium emissions when combusting number two fuel oil = gallons per hour number two fuel oil x 0.00000153 lbs/gallon (AP-42); or lbs per hour chromium emissions when combusting natural gas = mmCF natural gas per hour x 0.0014 lbs/mmCF (AP-42).

n) Pursuant to 401 KAR 63:021, formaldehyde emissions for all units shall not exceed 2.48 lbs/hr based on an eight-hour rolling average. Formula: lbs per hour formaldehyde emissions when combusting number two fuel oil = gallons per hour number two fuel oil x 0.0000334 lbs/gallon (AP-42); or lbs per hour formaldehyde emissions when combusting natural gas = mmCF natural gas per hour x 0.075 lbs/mmCF (AP-42).

o) Pursuant to 401 KAR 63:021, mercury emissions for all units shall not exceed 0.00229 lbs/hr based on an eight-hour rolling average. Formula: lbs per hour mercury emissions when combusting number two fuel oil = gallons per hour number two fuel oil x 0.000000167 lbs/gallon (AP-42); or lbs per hour mercury emissions when combusting natural gas = mmCF natural gas per hour x 0.00026 lbs/mmCF (AP-42).

p) Pursuant to 401 KAR 63:021, lead emissions for all units shall not exceed 0.171 lbs/hr based on an eight-hour rolling average. Formula: lbs per hour lead emissions when combusting number two fuel oil = gallons per hour number two fuel oil x 0.00000195 lbs/gallon (AP-42); or lbs per hour lead emissions when combusting natural gas = mmCF natural gas per hour x 0.0005 lbs/mmCF (AP-42).

q) Pursuant to 401 KAR 63:021, nickel emissions for all units shall not exceed 1.039 lbs/hr based on an eight-hour rolling average. Formula: lbs per hour nickel emissions when combusting number two fuel oil = gallons per hour number two fuel oil x 0.0000236 lbs/gallon (EPA-450); or lbs per hour nickel emissions when combusting natural gas = mmCF natural gas per hour x 0.0021 lbs/mmCF (AP-42).

r) Pursuant to 401 KAR 63:021, copper emissions for all units shall not exceed 1.71 lbs/hr based on an eight-hour rolling average. Formula: lbs per hour copper emissions when combusting number two fuel oil = gallons per hour number two fuel oil x 0.0000389 lbs/gallon (EPA-450); or lbs per hour copper emissions when combusting natural gas = mmCF natural gas per hour x 0.00085 lbs/mmCF (AP-42).

s) Pursuant to 401 KAR 63:021, manganese emissions for all units shall not exceed 0.159 lbs/hr based on an eight-hour rolling average. Formula: lbs per hour manganese emissions when combusting number two fuel oil = gallons per hour number two fuel oil x 0.00000361 lbs/gallon (EPA-450); or lbs per hour manganese emissions when combusting natural gas = mmCF natural gas per hour x 0.00038 lbs/mmCF (AP-42).

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

3. Testing Requirements:

Pursuant to 40 CFR 60.335(b), in conducting performance tests required by 40 CFR 60.8, the owner or operator shall use as test methods and procedures the test methods in Appendix A of Part 60 or other methods or procedures as specified in 40 CFR 60.335, except as provided for in 40 CFR 60.8(b).

4. Specific Monitoring Requirements:

a) Pursuant to 401 KAR 59:005, Section 4(9)(b) and in accordance with 401 KAR 52:020, Section 10, and 401 KAR 52:060, Acid Rain, incorporating by reference 40 CFR 75, the Division has approved an alternate procedure which shall be used in lieu of Continuous Emissions Monitors (CEM) to determine NOx, SO2, and CO2 emissions. The nitrogen oxides alternate shall be used as the indicator of continuous compliance with the nitrogen oxides emission limit. Excluding the startup and shut down periods, if any (1) one-hour rolling average exceeds the nitrogen oxides emission limitation, the permittee shall initiate an investigation of the cause of the exceedance and complete the necessary process repairs or take corrective action as soon as practicable. Pursuant to 40 CFR 75: 12 (d) (2), if a unit's operations exceed the level required to be a peaking unit, the permittee shall install and certify a continuous NOx emission monitoring system no later than December 31 of the following calendar year.

b) The alternate method for CEMS approved in 40 CFR 75, Appendix E, shall be used in lieu of the water-to-fuel monitoring system to monitor nitrogen oxide emissions. Compliance with 40 CFR 75, Appendix E, shall assure compliance with 40 CFR 60, Subpart GG.

c) Pursuant to 401 KAR 52:020, Section 10, material incorporated by reference, the permittee shall monitor the quantity of #2 fuel oil, in gallons, and natural gas, in millions of cubic feet, fired in each combustion turbine on a daily basis.

d) Pursuant to 40 CFR 60.334(h)(4), the owner or operator of any stationary turbine shall monitor sulfur content of the fuel being fired in the turbine. The frequency of determination of these values shall be as specified in the following approved Custom fuel monitoring schedule:

i) The permittee shall sample the natural gas for sulfur content every six months, except when firing pipeline quality natural gas, for which the sulfur content is assumed to be in compliance and testing is not required.

ii) The permittee shall sample the diesel fuel in accordance with 40 CFR Part 75, Appendix D.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

e) Pursuant to 401 KAR 52:020, Section 10, material incorporated by reference, to meet the periodic monitoring requirement for carbon monoxide the permittee shall use the formula provided in Condition (2)(e) above, and calculate an hourly emission. Excluding the startup and shut down periods, if any (3) three-hour average carbon monoxide value exceeds the permit limit, the permittee shall, as appropriate, initiate an investigation of the cause of the exceedance and complete necessary process repairs or take corrective action as soon as practicable.

f) Pursuant to 401 KAR 52:020, Section 10, incorporating 40 CFR 75, to meet the periodic monitoring requirement for carbon dioxide the permittee shall use the approved alternate procedure of 40 CFR 75, Appendix G in lieu of a continuous emission monitor (CEM).

g) The permittee shall install, calibrate, operate, test, and monitor all continuous monitoring systems and monitoring devices in accordance with 40 CFR 60.13 or 40 CFR 75.

h) The permittee shall monitor the hours of operation of each combustion turbine on a daily basis.

i) The permittee shall monitor the power output, in MW, of each combustion turbine on a daily basis.

5. Specific Record Keeping Requirements:

a) Pursuant to 40 CFR 60.7 (f), the owner or operator of the gas turbines shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems and devices; and all other information required by 40 CFR 60, Subpart A recorded in a permanent form suitable for inspection.

b) Records, including those documenting the results of each compliance test and all other records and reports required by this permit, shall be maintained for five (5) years pursuant to 401 KAR 52:020.

c) The permittee shall maintain a log of all sulfur content measurements as required in the approved custom fuel sulfur-monitoring plan (Condition 4(d) above).

d) The permittee shall maintain a daily log of the quantity of #2 fuel oil, in gallons, and natural gas, in millions of cubic feet, fired in each combustion turbine, for any consecutive twelve (12) month period.

e) The permittee shall maintain a daily log of all hours of operation for each combustion turbine, for any consecutive twelve (12) month period.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

f) The permittee shall maintain a daily log of all power output, in MW, for each combustion turbine, for any consecutive twelve (12) month period.

6. Specific Reporting Requirements:

a) Pursuant to 40 CFR 60.7 (c), the minimum required data (as follow) shall be maintained and furnished in the format specified by the Division. Owners or operators of facilities required to install continuous monitoring systems shall submit for every calendar quarter a written report of excess emissions (as defined in applicable sections) to the Division. All quarterly reports shall be postmarked by the thirtieth (30th) day following the end of each calendar quarter and shall include the following information:

i) The magnitude of the excess emissions computed in accordance with 40 CFR 60.13 (h), any conversion factors used, and the date and time of commencement and completion of each time period of excess emissions.

ii) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the emissions unit, including the nature and cause of any malfunction (if known), the corrective action taken or preventive measures adopted.

iii) The date and time identifying each period during which any continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

iv) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

b) Pursuant to 401 KAR 52:020, Section 10, material incorporated by reference, monitoring requirement for nitrogen oxides, excess emissions are defined as any (1) one-hour period during which the average emissions (arithmetic average) exceed the applicable nitrogen oxides emission standard. These periods of excess emissions shall be reported quarterly. The alternate method for CEMs approved in 40 CFR 75, Appendix E, shall be used for reporting excess emissions of nitrogen oxides. Compliance with 40 CFR 75, Appendix E, shall assure compliance with 40 CFR 60, Subpart GG.

c) Pursuant to 40 CFR 60.334(j)(1), each report of nitrogen oxides excess emissions shall include the average nitrogen oxides emission level in lieu of water to fuel ratio, average fuel consumption, ambient conditions, and turbine load.

d) Pursuant to 40 CFR 60.334(j)(2), excess emissions of sulfur dioxide are defined as any daily period (or as otherwise required in an approved custom fuel sulfur monitoring plan) during which the sulfur content of the fuel being fired in the gas turbine(s) exceeds the limitations set forth in Subsection 2, Emission Limitations. These periods of excess emissions shall be reported quarterly.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

e) Pursuant to 401 KAR 52:020, Section 10, material incorporated by reference, the permittee shall report excess carbon monoxide emissions quarterly to the Regional Office. Excess carbon monoxide emissions are defined as any (3) three-hour period during which the average hourly emissions (arithmetic average) exceed the applicable carbon monoxide permit limit.

7. Specific Control Equipment Operating Conditions:

a) The water injection system shall be operated while burning low sulfur diesel fuel to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or standard operating practices.

b) The Dry Low-NOx Burners on Emission Unit 04 shall be operated to maintain compliance with permitted emission limitations, in accordance with manufacturers specifications and/or standard operating practices.

c) See Section E for further requirements.

SECTION B -EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Units: 05, 06, and 07 (SCT5, SCT6, and SCT7)

Description:

1039 mmBtu/hr maximum rated heat input capacity, each, 114.91 MW nominal rated capacity output, each. General Electric 7EA natural gas-fired simple cycle combustion turbines equipped with water injection and Dry Low NOx burners for control.
Secondary Fuel: Low (<=0.05 %) Sulfur Fuel Oil
Construction commenced: August 2001

Applicable Regulations:

401 KAR 60:005, incorporating by reference 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines, for emissions unit with a heat input at peak load equal to or greater than 10 mmBtu/hour for which construction commenced after October 3, 1977, and 40 CFR 60, Subpart A, General Provisions.
401 KAR 51:017, Prevention of significant deterioration of air quality
401 KAR 63:020, Potentially hazardous matter or toxic substances
401 KAR 52:060, Acid Rain Permits, incorporating by reference 40 CFR Parts 72 to 78
401 KAR 51:160, NOx Requirements for Large Utility and Industrial Boilers, incorporating by reference 40 CFR 96
40 CFR Part 75, Continuous Emissions Monitoring (CEM)

1. Operating Limitations:

a) The permittee shall not operate any combustion turbine below 90% load, except during periods of startup and shutdown.
b) Each combustion turbine shall be fired on natural gas not less than 90% of the actual operation hours, and # 2 fuel oil not more than 10% of the actual operation hours during any consecutive 12 - month period.
c) Startup shall be defined as going from 0% load up to or above 90% load and shutdown means going from operating load down to 0% load.
d) Elapsed time during each startup or shutdown for each combustion turbine shall not exceed two (2) hours.
e) Each combustion turbine shall not start up or shut down more than 200 times per year.

2. Emission Limitations:

a) Pursuant to 401 KAR 51:017, while firing natural gas, nitrogen oxides emission levels in the exhaust gas shall not exceed a hourly average of 12 ppm by volume at 15 percent oxygen on a dry basis, and an annual (12 month rolling) average of 9 ppm by volume at 15 percent oxygen on a dry basis, except during periods of startup, shutdown, or malfunction. Continuous compliance with this limit shall be demonstrated by a continuous emission monitor (CEM).

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

b) Pursuant to 401 KAR 51:017, while firing low sulfur fuel oil, nitrogen oxides emission levels in the exhaust gas shall not exceed a hourly average of 42 ppm by volume at 15 percent oxygen on a dry basis, except during periods of startup, shutdown, or malfunction. Continuous compliance with this limit shall be demonstrated by a continuous emission monitor (CEM).

c) Pursuant to 401 KAR 51:017, the fuel sulfur content due to the firing of natural gas shall not exceed 2.0 grains/1000 SCF.

d) Pursuant to 401 KAR 51:017, the fuel sulfur content due to the firing of number two fuel oil shall not exceed 0.05% sulfur by weight.

e) Pursuant to 401 KAR 51:017, except during periods of startup, shutdown, or malfunction, the carbon monoxide emission level in the exhaust gas shall not exceed 25 ppm by volume at 15 % oxygen, on a dry basis, during any 3-hour average period while firing natural gas. Continuous compliance with this limit shall be demonstrated by a continuous emission monitor (CEM).

f) Pursuant to 401 KAR 51:017, except during periods of startup, shutdown, or malfunction, the carbon monoxide level in the exhaust gas shall not exceed 61 ppm by volume at 15 % oxygen, on a dry basis, during any 3-hour average period while firing number two fuel oil. Continuous compliance with this limit shall be demonstrated by a continuous emission monitor (CEM).

g) Pursuant to 401 KAR 51:017, while firing natural gas, particulate emissions shall not exceed 5 pounds per hour for each unit, based on any (3) three-hour average. Formula: lbs per hour particulate emissions = mmCF natural gas per hour x 5.0531 lbs/mmCF (EIS).

h) Pursuant to 401 KAR 51:017, while firing number two fuel oil, particulate emissions shall not exceed 10 pounds per hour for each unit, based on any (3) three-hour average. Formula: lbs per hour particulate emissions = gallons per hour x 0.0012766 lbs/gal (EIS).

i) To preclude 401 KAR 51:017, total formaldehyde emissions shall not exceed 10 tons for all units during any consecutive 12-month total. Formula: tons formaldehyde emissions = total unit operating hours x sum (total gallons fuel oil x .0000334 lbs/gal + total mmCF natural gas usage x 0.075 lbs/mmCF) / 2000 lbs/ton (AP-42).

3. Testing Requirements:

Pursuant to 40 CFR 60.335(b), in conducting performance tests required by 40 CFR 60.8, the owner or operator shall use as test methods and procedures the test methods in Appendix A of Part 60 or other methods or procedures as specified in 40 CFR 60.335, except as provided for in 40 CFR 60.8(b).

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

4. Specific Monitoring Requirements:

a) Pursuant material incorporated by reference 401 KAR 52:020, Section 10, and 40 CFR 75, the permittee shall install, calibrate, maintain, and operate the nitrogen oxides Continuous Emissions Monitor (CEM). The nitrogen oxides CEM shall be used as the indicator of continuous compliance with the nitrogen oxides emission standard. Excluding the startup and shut down periods, if any (1) one-hour average exceeds the nitrogen oxides emission limitation, the permittee shall, as appropriate, initiate an investigation of the cause of the exceedance and complete necessary process or CEM repairs or take corrective action as soon as practicable.

b) The nitrogen oxides CEM shall be used, in lieu of the water to fuel monitoring system, for reporting excess emissions in accordance with 40 CFR 60.334(b). The calibration of the water to fuel monitoring device required in 40 CFR 60.335(a) shall be replaced by the 40 CFR 75 certification tests of the nitrogen oxides CEM.

c) Pursuant to 401 KAR 52:020, Section 10, material incorporated by reference, the permittee shall monitor the quantity of #2 fuel oil, in gallons, and natural gas, in millions of cubic feet, fired in each combustion turbine on a daily basis.

d) Pursuant to 40 CFR 60.334(h)(4), the owner or operator of any stationary turbine shall monitor sulfur content of the fuel being fired in the turbine. The frequency of determination of these values shall be as specified in the following approved Custom fuel monitoring schedule
   i) The permittee shall sample the natural gas for sulfur content every six months, except when firing pipeline quality natural gas, for which the sulfur content is assumed to be in compliance and testing is not required.
   ii) The permittee shall sample the diesel fuel in accordance with 40 CFR Part 75, Appendix D.

e) Pursuant to 401 KAR 52:020, Section 10, material incorporated by reference, to meet the periodic monitoring requirement for carbon monoxide the permittee shall use a continuous emission monitor (CEM). Excluding the startup and shut down periods, if any (3) three-hour average carbon monoxide value exceeds the permit limit, the permittee shall, as appropriate, initiate an investigation of the cause of the exceedance and complete necessary process or CEM repairs or take corrective action as soon as practicable.

f) The permittee shall install, calibrate, operate, test, and monitor all continuous monitoring systems and monitoring devices in accordance with 40 CFR 60.13 or 40 CFR 75.

g) The permittee shall monitor the hours of operation of each combustion turbine on a daily basis.

h) The permittee shall monitor the power output, in MW, of each combustion turbine on a daily basis.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

5. Specific Record Keeping Requirements:

a) Pursuant to 40 CFR 60.7 (f), the owner or operator of the gas turbines shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems and devices; and all other information required by 40 CFR 60, Subpart A recorded in a permanent form suitable for inspection.

b) Records, including those documenting the results of each compliance test and all other records and reports required by this permit, shall be maintained for five (5) years pursuant to 401 KAR 52:020.

c) The permittee shall maintain a log of all sulfur content measurements as required in the approved custom fuel sulfur-monitoring plan (Condition 4(d) above).

d) The permittee shall maintain a daily log of the quantity of #2 fuel oil, in gallons, and natural gas, in millions of cubic feet, fired in each combustion turbine, for any consecutive twelve (12) month period.

e) The permittee shall maintain a daily log of all hours of operation for each combustion turbine, for any consecutive twelve (12) month period.

f) The permittee shall maintain a daily log of all power output, in MW, for each combustion turbine, for any consecutive twelve (12) month period.

6. Specific Reporting Requirements:

a) Pursuant to 40 CFR 60.7 (c), the minimum required data (as follow) shall be maintained and furnished in the format specified by the Division. Owners or operators of facilities required to install continuous monitoring systems shall submit for every calendar quarter a written report of excess emissions (as defined in applicable sections) to the Division. All quarterly reports shall be postmarked by the thirtieth (30th) day following the end of each calendar quarter and shall include the following information:

i) The magnitude of the excess emissions computed in accordance with the 40 CFR 60.13 (h), any conversion factors used, and the date and time of commencement and completion of each time period of excess emissions.

ii) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the emissions unit. The nature and cause of any malfunction (if known), the corrective action taken or preventive measures adopted.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

iii) The date and time identifying each period during which any continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

iv) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

b) Pursuant to 401 KAR 52:020, Section 10, material incorporated by reference, monitoring requirement with CEM for nitrogen oxides, excess emissions are defined as any (1) one-hour period during which the average emissions (arithmetic average) exceed the applicable nitrogen oxides emission standard. These periods of excess emissions shall be reported quarterly. The nitrogen oxide CEM reports shall be used in lieu of the water to fuel ratio requirements of 40 CFR 60.334(j)(1).

c) Pursuant to 40 CFR 60.334(j)(1), each report of nitrogen oxides excess emissions shall include the average nitrogen oxides emission level in lieu of water to fuel ratio, average fuel consumption, ambient conditions, and turbine load.

d) Pursuant to 40 CFR 60.334(j)(2), excess emissions of sulfur dioxide are defined as any daily period (or as otherwise required in an approved custom fuel sulfur monitoring plan) during which the sulfur content of the fuel being fired in the gas turbine(s) exceeds the limitations set forth in Subsection 2, Emission Limitations. These periods of excess emissions shall be reported quarterly.

e) Pursuant to 401 KAR 52:020, Section 10, material incorporated by reference, monitoring requirement with CEM for carbon monoxide, excess emissions are defined as any (3) three-hour period during which the average emissions (arithmetic average) exceed the applicable carbon monoxide permit limit. These periods of excess emissions shall be reported quarterly.

7. Specific Control Equipment Operating Conditions:

a) The water injection system shall be operated while burning low sulfur, number two fuel oil to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or standard operating practices.

b) The Dry Low-NOx burners shall be operated to maintain compliance with permitted emission limitations, in accordance with manufacturer's and/or standard operating practices.

c) See Section E for further requirements.

SECTION C - INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:020, Section 6. While these activities are designated as insignificant the permittee must comply with the applicable regulation and some minimal level of periodic monitoring may be necessary.

	Description	Generally Applicable Regulation
1.	Storage vessels containing petroleum or organic liquids with a capacity of less than 10,567 gallons, providing (a) the vapor pressure of the stored liquid is less than 1.5 psia at storage temperature, or (b) vessels greater than 580 gallons with stored liquids having greater than 1.5 psia vapor pressure are equipped with a permanent submerged fill pipe.	N/A
2.	Storage vessels containing inorganic aqueous liquids, except inorganic acids with boiling points below the maximum storage temperature at atmospheric pressure.	N/A
3.	Laboratory fume hoods and vents used exclusively for chemical or physical analysis, or for “bench scale production” R&D facilities.	N/A
4.	Machinery lubricants and waxes, including oils, greases or other lubricants applied as temporary protective coatings.	N/A
5.	#2 oil-fired space heaters or ovens rated at less than two million BTU per hour actual heat input provided the maximum sulfur content is less than 0.5% by weight.	N/A

SECTION C - INSIGNIFICANT ACTIVITIES (CONTINUED)

	Description	Generally Applicable Regulation
6.	Machining of metals, providing total solvent usage at the source for this activity does not exceed 60 gallons per month.	N/A
7.	Internal combustion engines using only gasoline, diesel fuel, natural gas, or Lp gas rated at 50hp or less.	N/A
8.	Water-related activities: demineralized water tanks; demineralizer vents; and pressure washing of equipment.	N/A
9.	Combustion activities: portable electrical generators (that can be moved by hand); mobile sources; tobacco smoking rooms; kerosene heaters.	N/A
10.	Ventilation and vents: plumbing traps, air compressor vents.	N/A
11.	Maintenance and repair: unpaved roads; painting; brazing, soldering, and welding; portable blast-cleaning equipment; blast-cleaning equipment using water; non-asbestos insulation installation/removal; instrument air dryer and filter maintenance; roof repair.	401 KAR 63:010
12.	Use of hand-held equipment: cutting, drilling, grinding.	N/A
13.	Housekeeping activities: steam cleaning; restroom cleaning.	N/A
14.	Office activities: photocopying, office supplies	N/A
15.	Natural gas piping.	N/A

SECTION C - INSIGNIFICANT ACTIVITIES (CONTINUED)

	Description	Generally Applicable Regulation
16.	Fugitive emissions related to movement of passenger vehicles.	401 KAR 63:010
17.	Soil borrow pits.	N/A
18.	Manual loading and unloading operations	N/A
19.	Construction and demolition activities.	401 KAR 63:010

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

1. As required by Section 1b of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26; compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.

2. Nitrogen oxides, sulfur dioxide, particulate matter, and carbon monoxide emissions, measured by applicable reference methods, or an equivalent or alternative method specified in 40 C.F.R. Chapter I, or by a test method specified in the state implementation plan shall not exceed the respective limitations specified herein.

SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS

Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used shall be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

1. Pursuant to Section 1b (IV) 1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
   a. Date, place as defined in this permit, and time of sampling or measurements;
   b. Analyses performance dates;
   c. Company or entity that performed analyses;
   d. Analytical techniques or methods used;
   e. Analyses results; and
   f. Operating conditions during time of sampling or measurement.

2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [Sections 1b(IV) 2 and 1a(8) of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

3. In accordance with the requirements of 401 KAR 52:020 Section 3(1) h the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
   a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
   b. To access and copy any records required by the permit:
   c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.

   Reasonable times are defined as during all hours of operation, during normal office hours, or during an emergency.

4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

5. Summary reports of any monitoring required by this permit, other than continuous emission or opacity monitors, shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation [Section 1b (V) 1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

6. The semi-annual reports are due by January 30th and July 30th of each year. Data from the continuous emission and opacity monitors shall be reported to the Technical Services Branch in accordance with the requirements of 401 KAR 59:005, General Provisions, Section 3(3). All reports shall be certified by a responsible official pursuant to 401 KAR 52:020 Section 23. All deviations from permit requirements shall be clearly identified in the reports.

7. In accordance with the provisions of 401 KAR 50:055, Section 1 the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
   a. When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
   b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall submit written notice upon request.

8. The owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Section F.7. above) to the Regional Office listed on the front of this permit within *30 days*. Other deviations from permit requirements shall *be included in the semiannual report required by Section F.6* [Section 1b (V) 3, 4. of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

9. Pursuant to 401 KAR 52:020, Permits, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit and the U.S. EPA in accordance with the following requirements:
   a. Identification of the term or condition;
   b. Compliance status of each term or condition of the permit;
   c. Whether compliance was continuous or intermittent;
   d. The method used for determining the compliance status for the source, currently and over the reporting period.
   e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements shall be demonstrated within the timeframes specified in the permit.

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

f. The certification shall be postmarked by January 30th of each year. Annual compliance certifications should be mailed to the following addresses:

Division for Air Quality
Frankfort Regional Office
643 Teton Trail, Suite B
Frankfort, KY 42003

U.S. EPA Region 4
Air Enforcement Branch
Atlanta Federal Center
61 Forsyth St.
Atlanta, GA 30303-8960

Division for Air Quality
Central Files
803 Schenkel Lane
Frankfort, KY 40601.

10. In accordance with 401 KAR 52:020, Section 22, the permittee shall provide the Division with all information necessary to determine its subject emissions within thirty (30) days of the date the KYEIS emission survey is mailed to the permittee.

11. Pursuant to Section VII (3) of the policy manual of the Division for Air Quality as referenced in 401 KAR 50:016, Section 1(1), results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days after the completion of the fieldwork.

SECTION G - GENERAL PROVISIONS

(a) General Compliance Requirements

1. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:020 and of the Clean Air Act and is grounds for enforcement action including but not limited to termination, revocation and reissuance, revision or denial of a permit [Section 1a, 3 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020 Section 26].

2. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a, 6 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

3. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:020, Section 19. The permit shall be reopened for cause and revised accordingly under the following circumstances:
   a. If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:020, Section 12;
   b. The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
   c. The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit;
   d. If any additional applicable requirements of the Acid Rain Program become applicable to the source.

   Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

4. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or compliance with the conditions of this permit [Section 1a, 7,8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

5. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such facts or corrected information to the permitting authority [401 KAR 52:020, Section 7(1)].

SECTION G - GENERAL PROVISIONS (CONTINUED)

6. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a, 14 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

7. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a, 4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

8. Except for requirements identified in this permit as state-origin requirements, all terms and conditions shall be enforceable by the United States Environmental Protection Agency and citizens of the United States [Section 1a, 15 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

9. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6) [Section 1a, 10 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

10. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:020, Section 11(3)(b)].

11. This permit does not convey property rights or exclusive privileges [Section 1a, 9 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

12. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Kentucky Cabinet for Environmental and Public Protection or any other federal, state, or local agency.

13. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry [401 KAR 52:020, Section 11(3)(d)].

14. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders [401 KAR 52:020, Section 11(3)(a)].

15. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic Minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.

SECTION G - GENERAL PROVISIONS (CONTINUED)

16. Pursuant to 401 KAR 52:020, Section 11, a permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of issuance. Compliance with the conditions of a permit shall be considered compliance with:
    a. Applicable requirements that are included and specifically identified in the permit and
    b. Non-applicable requirements expressly identified in this permit.

(b) Permit Expiration and Reapplication Requirements

1. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:020, Section 12].

2. The authority to operate granted shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:020 Section 8(2)].

(c) Permit Revisions

1. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 52:020, Section 14(2).

2. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

(d) Construction, Start-Up, and Initial Compliance Demonstration Requirements
None

(e) Acid Rain Program Requirements

1. If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.

SECTION G - GENERAL PROVISIONS (CONTINUED)

2. The source shall comply with all requirements and conditions of the Title IV, Acid Rain Permit issued for this source. The source shall also comply with all requirements of any revised or future acid rain permit(s) issued to this source.

(f) Emergency Provisions

1. Pursuant to 401 KAR 52:020 Section 24(1), an emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:
   a. An emergency occurred and the permittee can identify the cause of the emergency;
   b. The permitted facility was at the time being properly operated;
   c. During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
   d. Pursuant to 401 KAR 52:020, 401 KAR 50:055, and KRS 224.01-400, the permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
   e. This requirement does not relieve the source of other local, state or federal notification requirements.

2. Emergency conditions listed in General Condition (f) 1 above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:020, Section 24(3)].

3. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:020, Section 24(2)].

(g) Risk Management Provisions

1. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:

   RMP Reporting Center
   P.O. Box 1515
   Lanham-Seabrook, MD 20703-1515

2. If requested, submit additional relevant information to the Division or the U.S. EPA.

SECTION G - GENERAL PROVISIONS (CONTINUED)

(h) Ozone depleting substances

1. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:

    a. Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
    b. Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
    c. Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
    d. Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166
    e. Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
    f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.

2. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, *Servicing of Motor Vehicle Air Conditioners*.

SECTION H - ALTERNATE OPERATING SCENARIOS

None

SECTION I - COMPLIANCE SCHEDULE

None

SECTION J - ACID RAIN

ACID RAIN PERMIT CONTENTS

1) Statement of Basis

2) SO_2 allowances allocated under this permit and NOx requirements for each affected unit.

3) Comments, notes and justifications regarding permit decisions and changes made to the permit application forms during the review process, and any additional requirements or conditions.

4) The permit application submitted for this source. The owners and operators of the source must comply with the standard requirements and special provisions set forth in the Phase II Application and the Phase II NO_x Compliance Plan.

5) Summary of Actions

1) Statement of Basis:

Statutory and Regulatory Authorities: In accordance with KRS 224.10-100 and Titles IV and V of the Clean Air Act, the Kentucky Environmental and Public Protection Cabinet, Division for Air Quality issues this permit pursuant to Regulations 401 KAR 52:020, Permits, 401 KAR 52:060, Acid Rain Permit, and Federal Regulation 40 CFR Part 76.

2) SO_2 allowances allocated under this permit and NOx requirements for each affected unit:

PERMIT (Conditions)

Plant Name: J. K. Smith Generating Station, East Kentucky Power Cooperative, Inc.
Affected Unit: EU 01 (SCT 01) – EU 07 (SCT 07)

SO_2 Allowance Allocations and NO_x Requirements for the affected unit:

SO_2 Allowances	**Year**				
	2006	2007	2008	2009	2010
Tables 2, 3 or 4 of 40 CFR Part 73	0*	0*	0*	0*	0*

NO_x Requirements	
NO_x Limits	N/A**

* For newly constructed units there are no SO_2 allowance allocations per USEPA Acid Rain Program.

** This unit currently does not have applicable NO_x limits set by 40 CFR, part 76**.**

3) Comments, Notes, and Justifications:

a. The seven (7) combustion turbines, emission units 01 – 07 currently have no SO_2 allowances allocated by U.S. EPA.

b. The seven (7) combustion turbines, emission units 01 - 07 do not have applicable NO_x limits set by 40 CFR Part 76.

4) Permit Application:

a. The Phase II Permit Application is a part of this permit and the source must comply with the standard requirements and special provisions set forth in the Phase II Application.

5) Summary of Actions:

Present Action:

1. Draft Phase II Permit (#V-05-070) is being advertised for public comment.

SECTION K – NOx BUDGET

1) Statement of Basis

Statutory and Regulatory Authorities: In accordance with KRS 224.10-100, the Kentucky Natural Resources and Environmental Protection Cabinet issues this permit pursuant to 401 KAR 52:020 Title V permits, 401 KAR 51:160, NOx requirements for large utility and industrial boilers, and 40 CFR 97, Subpart C.

2) NO_x Budget Permit Application, Form DEP 7007EE

The NOx Budget Permit application for these electrical generating units was submitted to the Division and received on November 09, 2005. Requirements contained in that application are hereby incorporated into and made part of this NOx Budget Permit. Pursuant to 401 KAR 52:020, Section 3, the source shall operate in compliance with those requirements.

3) Comments, notes, justifications regarding permit decisions and changes made to the permit application forms during the review process, and any additional requirements or conditions.

The Affected units are seven (7) simple combustion turbines used for peak electrical power production. Each unit has a nameplate capacity to generate greater than 25 megawatts of electricity, which is offered for sale. The units use natural gas (at least 90 percent of the time) as a primary fuel source and fuel oil (not more than 10 percent of the time) as a secondary source.

4) Summary of Actions

The NOx Budget Permit is being issued as part of the initial Title V permit for this source. Public, affected state, and U.S. EPA review shall follow procedures specified in 401 KAR 52:100.